

STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT Energy Policy Division

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Comments from the Energy Policy Division, Department of Community, Trade and Economic Development on the proposed Department of Ecology Carbon Dioxide Mitigation Program for Fossil Fueled Thermal Electric Generating Facilities

Thank you for the opportunity to comment on your proposed rule for implementing this important piece of environmental legislation. We have provided a few written comments and are available to assist with any additional energy related aspects of this rulemaking as you move forward toward final adoption of the rule.

- 1. 030(5)(e) says "Hydrocarbon reformer emissions..." Should probably say "hydrocarbon reformer to hydrogen reformer" or steam reformer"
- 2. 030(5)(f) should probably insert "and" between the words "fuel" and "used"
- 3. Under 050 (Calculating total CO2 Emissions to be mitigated), (1) says "The annual CO2 emission rate is derived by the following formula OR similar analysis." Why create this uncertainty? The rule should establish a method to calculate emissions (or several explicit methods), but not allow an uncertain "similar analysis."
- 4. We are particularly concerned about what heat rate is used. This was an issue much discussed during the drafting of the legislation. The law says to use "...the manufacturer's or designer's guaranteed total net station generating capability, new equipment heat rate." The rule should stipulate which heating value to use. In the same subsection, the rule sets explicit conversion factors (though it doesn't say where they came from). We believe these are U.S. Department of Energy- Energy Information Administration factors. Wherever they are from, they presume either Higher Heating Value (HHV) or Lower Hearing Value (LHV). The rule should make sure the heat rate uses the same value (using HHV for both or LHV for both works equally well). But mixing the values will not work. The rule should require explicit use of the appropriate heat rate (HHV or LHV).
- 5. Under 050(3) Cogeneration, the calculation of the cogeneration credit is based (among other things) on "...energy supplied by the cogeneration plant to the "steam host" per the contract or other binding obligation/agreement between the parties in mmBtu/yr." This misses the point that some "hosts" are also the provider and there may be no contract that sets out the details essentially internal steam delivery. The rule should require an analysis of steam delivery (estimate) beyond just the "obligation/agreement" for these cases.
- 6. The Cogeneration concept is of steam delivered (not net). A better analysis would discount condensate return to the boiler. This is consistent with the statute's recognition

- that capacity of the plant should be net too. This would lower the cogeneration credit a bit, but be a more accurate accounting. This should be relatively easy to determine.
- 7. Under 050(5) DOE asks for comments on whether they have correctly stated (b), that an increase in operating hours is not an exempt modification. We agree. For example, a facility operating under Order of Approval restrictions to 50 percent capacity would have to mitigate for increased emissions if it applied for a new Order of Approval to operate at an increased capacity (if the increase represents a 15% or more increase in CO2 as per the statute).
- 8. Under 060(3) Third Party Option, paragraphs 3 and 4 describes the need to make payments "no later than 120 days after the start of commercial operation." This works only for new plant. The rule should add "...or operability" for plant modifications (since they are already involved in commercial operations, especially if the modification is in addition operating hours approved (as above).
- 9. The rule does not specify what should be in a mitigation plan. The only direction comes in the definitions which says "...a proposal that includes the process or means to achieve CO2 mitigation through use of mitigation projects or carbon credits." We have seen previous instances where a poor "plan" can be provided when the plan requirements are not explicit and prescriptive. We would like to see something in the rule that gives more explicit direction on what a mitigation plan ought to look like.